

## EAST Search History

## EAST Search History (Prior Art)

| Ref # | Hits | Search Query   | DBs   | Default Operator | Plurals | Time Stamp          |
|-------|------|--|---|------------------|---------|---------------------|
| S1    | 434  | ("20010027159"  <br>"20010041460"  <br>"20020001746"  <br>"20020014406"  <br>"20020033330"  <br>"20020076133"  <br>"20020106297"  <br>"20020115252"  <br>"20020134671"  <br>"20020140103"  <br>"20020170821"  <br>"20020191916"  <br>"20030019326"  <br>"20030022487"  <br>"20030035906"  <br>"20030042131"  <br>"20030044118"  <br>"20030063883"  <br>"20030077914"  <br>"20030079838"  <br>"20030097858"  <br>"20030127319"  <br>"20030134054"  <br>"20030141186"  <br>"20030173207"  <br>"20030173208"  <br>"20030175142"  <br>"20030178637"  <br>"20030185266"  <br>"20040043557"  <br>"20040077161"  <br>"20040105644"  <br>"20040259305"  <br>"20050000794"  <br>"20050006768"  <br>"20050048802"  <br>"20050175287"  <br>"20050183946"  <br>"20060054496"  <br>"20060057283"  <br>"20060057304"  <br>"20060071592"  <br>"20060134522"  <br>"3309302"   "3616403"  <br>"3850604"   "4082569"  <br>"4111523"   "4437966"  <br>"4587225"   "4619680"  <br>"4710940"   "4785459"  <br>"4915810"   "4978437" | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ              | ON      | 2008/09/05<br>10:33 |



|           |           |
|-----------|-----------|
| "5085904" | "5107538" |
| "5119460" | "5173271" |
| "5174876" | "5196041" |
| "5200029" | "5206925" |
| "5225288" | "5237194" |
| "5287427" | "5296089" |
| "5303319" | "5306569" |
| "5309302" | "5338625" |
| "5355089" | "5381262" |
| "5427669" | "5435826" |
| "5472795" | "5475528" |
| "5475569" | "5478456" |
| "5483613" | "5499207" |
| "5512147" | "5538796" |
| "5555127" | "5561004" |
| "5563979" | "5565071" |
| "5569520" | "5591520" |
| "5597660" | "5603816" |
| "5607560" | "5607789" |
| "5612152" | "5613995" |
| "5645626" | "5654054" |
| "5654984" | "5686360" |
| "5689522" | "5693956" |
| "5702829" | "5718813" |
| "5719976" | "5731661" |
| "5738731" | "5755938" |
| "5757126" | "5762768" |
| "5771562" | "5792550" |
| "5811177" | "5830330" |
| "5831262" | "5841931" |
| "5847865" | "5849163" |
| "5853830" | "5855744" |
| "5870273" | "5882946" |
| "5900057" | "5909346" |
| "5930046" | "5930584" |
| "5942089" | "5948215" |
| "5952778" | "5961682" |
| "5966491" | "5977582" |
| "6000603" | "6001224" |
| "6004660" | "6024844" |
| "6045626" | "6046081" |
| "6051114" | "6051296" |
| "6057557" | "6058233" |
| "6071323" | "6077642" |
| "6080643" | "6088492" |
| "6093944" | "6106933" |
| "6117279" | "6133670" |
| "6146225" | "6154582" |
| "6157765" | "6162709" |
| "6165566" | "6168884" |
| "6176986" | "6197217" |
| "6204111" | "6210544" |
| "6214660" | "6232242" |
| "6236793" | "6242129" |
| "6242132" | "6248291" |
| "6248640" | "6252397" |
| "6261917" | "6280585" |
| "6280875" | "6281142" |
| "6287986" | "6288835" |



|    |    |   |   |     |    |                     |
|----|----|---|---|-----|----|---------------------|
|    |    | "6290821"   "6290822"  <br>"6300215"   "6302939"  <br>"6306265"   "6344419"  <br>"6350353"   "6356694"  <br>"6358810"   "6361662"  <br>"6365300"   "6365319"  <br>"6376027"   "6409965"  <br>"6413382"   "6413645"  <br>"6416598"   "6423776"  <br>"6433380"   "6444750"  <br>"6452717"   "6488822"  <br>"6506289"   "6511615"  <br>"6533907"   "6533907"  <br>"6537428"   "6563998"  <br>"6576546"   "6602338"  <br>"6605228"   "6615614"  <br>"6632563"   "6673716"  <br>"6683244"   "6683749"  <br>"6750156"   "6760520"  <br>"6768855"   "6818356"  <br>"6827826"   "6846765"  <br>"6884327"   "RE32449").<br>PN. |   |     |    |                     |
| S2 | 9  | ((DAVID) near2<br>(DAWES)).INV.   | US-PGPUB;<br>USPAT; USOCR   | ADJ | ON | 2008/09/05<br>10:34 |
| S3 | 12 | ((DAVID) near2<br>(DAWES)).INV.   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/09/05<br>10:35 |
| S4 | 60 | (symmorphix or (infinite<br>near2 power)).as.   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/09/05<br>10:39 |
| S5 | 1  | S3 and S4   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/09/05<br>10:42 |
| S6 | 21 | S1 and S4   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/09/05<br>10:42 |
| S7 | 11 | S3 not S4   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/09/05<br>10:44 |



|     |     |   |   |     |    |                     |
|-----|-----|---|---|-----|----|---------------------|
| S8  | 0   | S1 and S3 and S4 not S5   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/09/05<br>10:51 |
| S9  | 483 | S1 or S3 or S4 not S5   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/09/05<br>10:51 |
| S10 | 196 | S9 and ( (rare-earth) or (rare earth) or al <sub>2</sub> o <sub>3</sub> or y <sub>2</sub> o <sub>3</sub> or tio <sub>2</sub> or alumina or (aluminum-oxide) or (aluminum oxide) or (titanium-oxide) or (titanium oxide) or ("Al. sub.2O.sub.3") or ("Y. sub.2O.sub.3") or ("TiO. sub.2"))   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/09/05<br>10:57 |
| S11 | 118 | S9 and ( (rare-earth) or (rare earth) or al <sub>2</sub> o <sub>3</sub> or y <sub>2</sub> o <sub>3</sub> or tio <sub>2</sub> or alumina or (aluminum-oxide) or (aluminum oxide) or (titanium-oxide) or (titanium oxide) or ("Al. sub.2O.sub.3") or ("Y. sub.2O.sub.3") or ("TiO. sub.2")) with (waveguide or slab or layer))                              | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/09/05<br>10:58 |
| S12 | 43  | ("2003/0173208"   "2003/0175142"   "2003/0178637"   "2003/0185266"   "2004/0043557"   "2004/0081415"   "2004/0105644"   "2004/0259305"   "2005/0000794"   "2005/0006768"   "2005/0048802"   "2005/0175287"   "2005/0183946"   "2006/0054496"   "2006/0057283"   "2006/0057304"   "2006/0071592"   "2006/0134522"   "2007/0125638"   "2007/0172681").URPN. | USPAT   | ADJ | ON | 2008/09/05<br>10:59 |



|     |     |   |                           |     |    |                     |
|-----|-----|---|---------------------------|-----|----|---------------------|
| S13 | 566 | ("20010027159"  <br>"20010031122"  <br>"20010034106"  <br>"20010041460"  <br>"20020001746"  <br>"20020009630"  <br>"20020014406"  <br>"20020033330"  <br>"20020076133"  <br>"20020106297"  <br>"20020115252"  <br>"20020117201"  <br>"20020134671"  <br>"20020140103"  <br>"20020170821"  <br>"20030019326"  <br>"20030022487"  <br>"20030035906"  <br>"20030042131"  <br>"20030062082"  <br>"20030063883"  <br>"20030077914"  <br>"20030079838"  <br>"20030097858"  <br>"20030127319"  <br>"20030134054"  <br>"20030141186"  <br>"20030143853"  <br>"20030173207"  <br>"20030173208"  <br>"20030174391"  <br>"20030175142"  <br>"20030178637"  <br>"20030185266"  <br>"20040043557"  <br>"20040077161"  <br>"20040105644"  <br>"20040245561"  <br>"20040259305"  <br>"20050000749"  <br>"20050000794"  <br>"20050006768"  <br>"20050048802"  <br>"20050183946"  <br>"20060054496"  <br>"20060057283"  <br>"20060057304"  <br>"20060071592"  <br>"20060134522"  <br>"20070053139"  <br>"3309302"   "3590004"  <br>"3616403"   "3826992"  <br>"3850604"   "4082569"  <br>"4111523"   "4200474"  <br>"4399209"   "4416966"  <br>"4428646"   "4437966"  <br>"4440846"   "4481283"  <br>"4515431"   "4587225" | US-PGPUB;<br>USPAT; USOCR | ADJ | ON | 2008/09/05<br>10:59 |
|-----|-----|---|---------------------------|-----|----|---------------------|



|                   |            |
|-------------------|------------|
| "4603940"         | "4619680"  |
| "4648699"         | "4710940"  |
| "4712075"         | "4734340"  |
| "4740809"         | "4742307"  |
| "4766050"         | "4785459"  |
| "4867518"         | "4895422"  |
| "4915810"         | "4947541"  |
| "4971941"         | "4978437"  |
| "4980749"         | "4992822"  |
| "5005102"         | "5005175"  |
| "5015353"         | "5037181"  |
| "5045397"         | "5055169"  |
| "5064265"         | "5085904"  |
| "5107538"         | "5110696"  |
| "5111355"         | "5119460"  |
| "5142438"         | "5173271"  |
| "5174876"         | "5185689"  |
| "5196041"         | "5196958"  |
| "5200029"         | "5201977"  |
| "5206925"         | "5216572"  |
| "5225288"         | "5237439") |
| PN. OR ("5252194" |            |
| "5274495"         | "5275715"  |
| "5286608"         | "5287427"  |
| "5296089"         | "5303319"  |
| "5306569"         | "5308782"  |
| "5309302"         | "5313089"  |
| "5316982"         | "5338625"  |
| "5349600"         | "5350705"  |
| "5355089"         | "5381262"  |
| "5393371"         | "5396362"  |
| "5405796"         | "5427669"  |
| "5433835"         | "5435826"  |
| "5441803"         | "5454919"  |
| "5457569"         | "5469292"  |
| "5472795"         | "5475528"  |
| "5478456"         | "5479542"  |
| "5483613"         | "5489548"  |
| "5499207"         | "5512147"  |
| "5514908"         | "5538796"  |
| "5543960"         | "5552337"  |
| "5552341"         | "5555127"  |
| "5561004"         | "5561326"  |
| "5563090"         | "5563899"  |
| "5563979"         | "5565071"  |
| "5569520"         | "5591520"  |
| "5597660"         | "5603816"  |
| "5605565"         | "5605858"  |
| "5607560"         | "5607789"  |
| "5612152"         | "5613995"  |
| "5622607"         | "5639685"  |
| "5645626"         | "5652431"  |
| "5654054"         | "5654984"  |
| "5656852"         | "5679982"  |
| "5686360"         | "5689522"  |
| "5693956"         | "5698489"  |
| "5702829"         | "5716875"  |
| "5717517"         | "5718813"  |
| "5719976"         | "5729323"  |



|                   |            |
|-------------------|------------|
| "5731661"         | "5738731"  |
| "5755938"         | "5757126"  |
| "5762768"         | "5771562"  |
| "5780336"         | "5783353"  |
| "5792550"         | "5802700"  |
| "5811177"         | "5811851"  |
| "5814195"         | "5815309"  |
| "5830330"         | "5831262"  |
| "5834357"         | "5841931"  |
| "5846638"         | "5846859"  |
| "5847865"         | "5849163"  |
| "5851364"         | "5853830"  |
| "5855744"         | "5870273"  |
| "5877062"         | "5877890"  |
| "5882946"         | "5892857"  |
| "5893662"         | "5900057"  |
| "5907766"         | "5907784"  |
| "5909346"         | "5916727"  |
| "5926707"         | "5930046"  |
| "5930584"         | "5942089"  |
| "5948215"         | "5948216"  |
| "5952778"         | "5953477"  |
| "5953609"         | "5961682"  |
| "5961683"         | "5966491"  |
| "5977582"         | "5985731") |
| PN. OR ("5996793" |            |
| "6000603"         | "6001224"  |
| "6004660"         | "6024844"  |
| "6033786"         | "6045626"  |
| "6046081"         | "6051114"  |
| "6051296"         | "6052176"  |
| "6052220"         | "6052397"  |
| "6057557"         | "6058233"  |
| "6069072"         | "6069775"  |
| "6071055"         | "6071323"  |
| "6074730"         | "6077642"  |
| "6080643"         | "6083789"  |
| "6093944"         | "6100155"  |
| "6100187"         | "6104574"  |
| "6106933"         | "6112002"  |
| "6117279"         | "6133670"  |
| "6140671"         | "6141475"  |
| "6144097"         | "6146225"  |
| "6156606"         | "6157765"  |
| "6159297"         | "6162709"  |
| "6165566"         | "6168884"  |
| "6174644"         | "6176986"  |
| "6177351"         | "6183614"  |
| "6188544"         | "6197167"  |
| "6198217"         | "6204111"  |
| "6210544"         | "6214660"  |
| "6224638"         | "6232242"  |
| "6236793"         | "6242129"  |
| "6242132"         | "6248291"  |
| "6248640"         | "6261917"  |
| "6266193"         | "6268695"  |
| "6274008"         | "6274484"  |
| "6280585"         | "6280875"  |
| "6281142"         | "6287986"  |



"6288835" | "6290821" |  
"6290822" | "6291763" |  
"6300215" | "6302939" |  
"6303426" | "6306265" |  
"6329282" | "6339523" |  
"6344419" | "6350353" |  
"6356694" | "6358810" |  
"6361662" | "6365300" |  
"6365319" | "6376027" |  
"6376765" | "6379635" |  
"6379835" | "6391166" |  
"6409965" | "6413382" |  
"6413645" | "6416598" |  
"6423776" | "6433380" |  
"6444104" | "6444750" |  
"6445536" | "6452717" |  
"6459542" | "6477005" |  
"6488822" | "6497598" |  
"6506289" | "6511615" |  
"6522067" | "6533907" |  
"6537428" | "6558836" |  
"6559375" | "6563998" |  
"6570325" | "6576546" |  
"6586670" | "6602338" |  
"6605228" | "6615614" |  
"6632563" | "6673716" |  
"6683244" | "6683749" |  
"6750156" | "6760520" |  
"6768855" | "6818356").  
PN. OR ("6827826" |  
"6846765" | "6884327" |  
"RE32449").PN. OR  
("2002/0014406" |  
"2002/0115252" |  
"2002/0134671" |  
"2002/0140103" |  
"2003/0035906" |  
"2003/0044118" |  
"2003/0063883" |  
"2003/0077914" |  
"2003/0134054" |  
"2003/0173207" |  
"6214660" | "6236793" |  
"6248640" | "6261917" |  
"6288835" | "6300215" |  
"6365319" | "6433380" |  
"6533907" | "6576546" |  
"6602338" | "6615614" |  
"6683244" | "6683749" |  
"6750156" | "6884327" |  
"7133584" | "7205662" |  
"7238628" | "7262131").  
URPN.



|     |     |            |           |                           |     |    |                     |
|-----|-----|------------|-----------|---------------------------|-----|----|---------------------|
| S14 | 933 | ("1949914" | "2597907" | US-PGPUB;<br>USPAT; USOCR | ADJ | ON | 2008/09/05<br>11:00 |
|     |     | "2998328"  | "3102038" |                           |     |    |                     |
|     |     | "3130061"  | "3180747" |                           |     |    |                     |
|     |     | "3212921"  | "3282729" |                           |     |    |                     |
|     |     | "3336730"  | "3344586" |                           |     |    |                     |
|     |     | "3350846"  | "3379559" |                           |     |    |                     |
|     |     | "3410058"  | "3428476" |                           |     |    |                     |
|     |     | "3442686"  | "3447288" |                           |     |    |                     |
|     |     | "3457467"  | "3469372" |                           |     |    |                     |
|     |     | "3486301"  | "3492137" |                           |     |    |                     |
|     |     | "3499265"  | "3522066" |                           |     |    |                     |
|     |     | "3533816"  | "3534531" |                           |     |    |                     |
|     |     | "3544348"  | "3581491" |                           |     |    |                     |
|     |     | "3630881"  | "3640891" |                           |     |    |                     |
|     |     | "3667925"  | "3706603" |                           |     |    |                     |
|     |     | "3782077"  | "3833406" |                           |     |    |                     |
|     |     | "3853540"  | "3857689" |                           |     |    |                     |
|     |     | "3881891"  | "3923484" |                           |     |    |                     |
|     |     | "3928026"  | "3942991" |                           |     |    |                     |
|     |     | "3956093"  | "3993811" |                           |     |    |                     |
|     |     | "4036721"  | "4038090" |                           |     |    |                     |
|     |     | "4076541"  | "4100055" |                           |     |    |                     |
|     |     | "4101050"  | "4116806" |                           |     |    |                     |
|     |     | "4131200"  | "4142023" |                           |     |    |                     |
|     |     | "4152223"  | "4155735" |                           |     |    |                     |
|     |     | "4163987"  | "4166018" |                           |     |    |                     |
|     |     | "4175030"  | "4178273" |                           |     |    |                     |
|     |     | "4243536"  | "4247576" |                           |     |    |                     |
|     |     | "4255211"  | "4318796" |                           |     |    |                     |
|     |     | "4345005"  | "4356429" |                           |     |    |                     |
|     |     | "4364995"  | "4405436" |                           |     |    |                     |
|     |     | "4425246"  | "4430190" |                           |     |    |                     |
|     |     | "4430366"  | "4443239" |                           |     |    |                     |
|     |     | "4444643"  | "4445965" |                           |     |    |                     |
|     |     | "4466696"  | "4466831" |                           |     |    |                     |
|     |     | "4466832"  | "4474425" |                           |     |    |                     |
|     |     | "4491509"  | "4500409" |                           |     |    |                     |
|     |     | "4503158"  | "4514456" |                           |     |    |                     |
|     |     | "4530720"  | "4536998" |                           |     |    |                     |
|     |     | "4537866"  | "4539507" |                           |     |    |                     |
|     |     | "4542061"  | "4552791" |                           |     |    |                     |
|     |     | "4561718"  | "4564435" |                           |     |    |                     |
|     |     | "4569745"  | "4576920" |                           |     |    |                     |
|     |     | "4581282"  | "4586785" |                           |     |    |                     |
|     |     | "4588540"  | "4589891" |                           |     |    |                     |
|     |     | "4590118"  | "4592619" |                           |     |    |                     |
|     |     | "4594279"  | "4619680" |                           |     |    |                     |
|     |     | "4626408"  | "4642129" |                           |     |    |                     |
|     |     | "4645524"  | "4662521" |                           |     |    |                     |
|     |     | "4680061"  | "4681818" |                           |     |    |                     |
|     |     | "4681982"  | "4702963" |                           |     |    |                     |
|     |     | "4714536"  | "4738896" |                           |     |    |                     |
|     |     | "4760569"  | "4762382" |                           |     |    |                     |
|     |     | "4765818"  | "4767171" |                           |     |    |                     |
|     |     | "4781424"  | "4787927" |                           |     |    |                     |
|     |     | "4826288"  | "4826584" |                           |     |    |                     |
|     |     | "4839011"  | "4842893" |                           |     |    |                     |
|     |     | "4847145"  | "4851023" |                           |     |    |                     |



|            |           |
|------------|-----------|
| "4856859"  | "4859015" |
| "4859017"  | "4878765" |
| "4881979"  | "4888036" |
| "4892374"  | "4895201" |
| "4904036") | PN. OR    |
| ("4904362" | "4906311" |
| "4915737"  | "4915738" |
| "4926995"  | "4936645" |
| "4937113"  | "4937115" |
| "4938594"  | "4945074" |
| "4946501"  | "4954371" |
| "4962067"  | "4978437" |
| "4979973"  | "4983310" |
| "4983432"  | "4989935" |
| "4992095"  | "5005102" |
| "5005175"  | "5006203" |
| "5008148"  | "5013347" |
| "5018328"  | "5021298" |
| "5026135"  | "5027079" |
| "5034284"  | "5046808" |
| "5049609"  | "5055137" |
| "5056096"  | "5062885" |
| "5064716"  | "5068071" |
| "5072329"  | "5091233" |
| "5096562"  | "5101461" |
| "5119062"  | "5119460" |
| "5123068"  | "5124204" |
| "5128081"  | "5128801" |
| "5130005"  | "5130110" |
| "5139541"  | "5140658" |
| "5141549"  | "5142437" |
| "5143533"  | "5153073" |
| "5155573"  | "5163003" |
| "5164003"  | "5169547" |
| "5171415"  | "5179614" |
| "5180478"  | "5183704" |
| "5189503"  | "5189549" |
| "5194917"  | "5200029" |
| "5203980"  | "5214306" |
| "5216572"  | "5217506" |
| "5219929"  | "5238668" |
| "5240885"  | "5244556" |
| "5244729"  | "5247190" |
| "5248890"  | "5254450" |
| "5259941"  | "5260095" |
| "5262245"  | "5280550" |
| "5282946"  | "5290609" |
| "5290671"  | "5290730" |
| "5296724"  | "5297561" |
| "5303319"  | "5319727" |
| "5320800"  | "5321649" |
| "5327282"  | "5328580" |
| "5337374"  | "5338331" |
| "5344633"  | "5346563" |
| "5354548"  | "5355248" |
| "5362410"  | "5373175" |
| "5379311"  | "5382344" |
| "5382817"  | "5384192" |
| "5391756"  | "5399842" |



|                   |            |
|-------------------|------------|
| "5408109"         | "5418182"  |
| "5418388"         | "5438639"  |
| "5439500"         | "5447801"  |
| "5449926"         | "5453872"  |
| "5462779"         | "5466519"  |
| "5475528"         | "5482896"  |
| "5491023"         | "5491767"  |
| "5494743"         | "5500122"  |
| "5500764")        | PN. OR     |
| ("5503820"        | "5508753"  |
| "5520807"         | "5530269"  |
| "5532870"         | "5536405"  |
| "5537505"         | "5543237"  |
| "5543644"         | "5545595"  |
| "5548474"         | "5554866"  |
| "5555486"         | "5559912"  |
| "5560773"         | "5561307"  |
| "5565273"         | "5569561"  |
| "5570448"         | "5575953"  |
| "5576152"         | "5576564"  |
| "5579154"         | "5581397"  |
| "5583350"         | "5593788"  |
| "5607780"         | "5625233"  |
| "5663088"         | "5672220"  |
| "5679494"         | "5679969"  |
| "5683850"         | "5688724"  |
| "5710384"         | "5714402"  |
| "5739742"         | "5757126"  |
| "5759653"         | "5771562"  |
| "5811177"         | "5837593"  |
| "5853830"         | "H000568") |
| PN. OR ("5475528" |            |
| "5499207"         | "5538796"  |
| "5555127"         | "5563979"  |
| "5565071"         | "5603816"  |
| "5613995"         | "5645626"  |
| "5654054"         | "5693956"  |
| "5738731"         | "5792550"  |
| "5847865"         | "5853830"  |
| "5870273"         | "5882946"  |
| "5900057"         | "5930584"  |
| "5952778"         | "5961682"  |
| "6004660"         | "6045626"  |
| "6046081"         | "6051296"  |
| "6071323"         | "6077642"  |
| "6106933"         | "6146225"  |
| "6204111")        | URPN.      |



|     |      |  |   |     |    |                     |
|-----|------|--|---|-----|----|---------------------|
| S15 | 182  | (<br>"3442686"   "3640891"  <br>"3857689"   "3942991"  <br>"4038090"   "4067745"  <br>"4076541"   "4155735"  <br>"4298385"   "4322249"  <br>"4350729"   "4354912"  <br>"4419311"   "4421861"  <br>"4485151"   "4525464"  <br>"4528234"   "4532190"  <br>"4535033"   "4552791"  <br>"4575919"   "4576920"  <br>"4702963"   "4724169"  <br>"4737015"   "4904542"  <br>"4919778"   "4923279"  <br>"4940693"   "4962067"  <br>"4962995"   "4993034"  <br>"5005175"   "5007698"  <br>"5023885"   "5027079"  <br>"5039190"   "5102697"  <br>"5108846"   "5128801"  <br>"5192410"   "5279722").<br>PN. OR ("5085904"  <br>"5107538"   "5472795"  <br>"5475528"   "RE32449").<br>URPN. | US-PGPUB;<br>USPAT; USOCR   | ADJ | ON | 2008/09/05<br>11:00 |
| S16 | 93   | (<br>"3970360"   "4284663"  <br>"4521443"   "4637025"  <br>"4679892"   "4787689"  <br>"4826288"   "4840816"  <br>"4846541"   "4880288"  <br>"4886587"   "4901321"  <br>"4936650"   "4938836"  <br>"4946241"   "5039190"  <br>"5043991"   "5107538"  <br>"5111466"   "5123027"  <br>"5144498"   "5157746").<br>PN. OR ("2007/0184345"<br>  "5174876"   "5206925"<br>  "5303319").URPN.  | US-PGPUB;<br>USPAT; USOCR   | ADJ | ON | 2008/09/05<br>11:01 |
| S17 | 1731 | S11 or S12 or S13 or S14<br>or S15 or S16  | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/09/05<br>11:01 |



|     |      |  |   |     |    |                     |
|-----|------|--|---|-----|----|---------------------|
| S18 | 560  | S17 and ( (rare-earth) or (rare earth) or al <sub>2</sub> o <sub>3</sub> or y <sub>2</sub> o <sub>3</sub> or tio <sub>2</sub> or alumina or (aluminum-oxide) or (aluminum oxide) or (titanium-oxide) or (titanium oxide) or ("Al.sub.2O.sub.3") or ("Y.sub.2O.sub.3") or ("TiO.sub.2")) with (waveguide or slab or layer)) | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/09/05<br>11:01 |
| S19 | 76   | S18 and buffer and amorphous   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/09/05<br>11:02 |
| S20 | 95   | S18 and ((couple or coupling or coupler or coupled) with (waveguide))  | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/09/05<br>11:09 |
| S21 | 81   | S20 not S19  | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/09/05<br>11:09 |
| S22 | 24   | S21 and S1   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/09/05<br>11:10 |
| S23 | 57   | S21 not S1   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/09/05<br>11:10 |
| S24 | 1378 | ((laser diode) with substrate) and ( (rare-earth) or (rare earth) or al <sub>2</sub> o <sub>3</sub> or y <sub>2</sub> o <sub>3</sub> or tio <sub>2</sub> or alumina or (aluminum-oxide) or (aluminum oxide) or (titanium-oxide) or (titanium oxide) or ("Al.sub.2O.sub.3") or ("Y.sub.2O.sub.3") or ("TiO.sub.2"))         | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/10/10<br>12:03 |



|     |     |   |  |     |    |                  |
|-----|-----|---|--|-----|----|------------------|
| S25 | 32  | ((laser diode) with substrate) and ( core near5 ( (rare-earth) or (rare earth) or al2o3 or y2o3 or tio2 or alumina or (aluminum-oxide) or (aluminum oxide) or (titanium-oxide) or (titanium oxide)or ("Al. sub.2O.sub.3") or ("Y. sub.2O.sub.3") or ("TiO. sub.2"))))   | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/10/10 12:03 |
| S26 | 9   | ((laser diode) with substrate) and ( core near5 ( (rare-earth) or (rare earth) or al2o3 or y2o3 or tio2 or alumina or (aluminum-oxide) or (aluminum oxide) or (titanium-oxide) or (titanium oxide)or ("Al. sub.2O.sub.3") or ("Y. sub.2O.sub.3") or ("TiO. sub.2")))) and ( cladding near5 ( (rare-earth) or (rare earth) or al2o3 or tio2 or alumina or (aluminum-oxide) or (aluminum oxide) or (titanium-oxide) or (titanium oxide)or ("Al. sub.2O.sub.3") or ("TiO. sub.2")))) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/10/10 12:04 |
| S27 | 434 | ("20010027159"   "20010041460"   "20020001746"   "20020014406"   "20020033330"   "20020076133"   "20020106297"   "20020115252"   "20020134671"   "20020140103"   "20020170821"   "20020191916"   "20030019326"   "20030022487"   "20030035906"   "20030042131"   "20030044118"   "20030063883"   "20030077914"   "20030079838"   "20030097858"   "20030127319"   "20030134054"   "20030141186"  | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | ADJ | ON | 2008/10/10 12:08 |



|               |           |
|---------------|-----------|
| "20030173207" |           |
| "20030173208" |           |
| "20030175142" |           |
| "20030178637" |           |
| "20030185266" |           |
| "20040043557" |           |
| "20040077161" |           |
| "20040105644" |           |
| "20040259305" |           |
| "20050000794" |           |
| "20050006768" |           |
| "20050048802" |           |
| "20050175287" |           |
| "20050183946" |           |
| "20060054496" |           |
| "20060057283" |           |
| "20060057304" |           |
| "20060071592" |           |
| "20060134522" |           |
| "3309302"     | "3616403" |
| "3850604"     | "4082569" |
| "4111523"     | "4437966" |
| "4587225"     | "4619680" |
| "4710940"     | "4785459" |
| "4915810"     | "4978437" |
| "5085904"     | "5107538" |
| "5119460"     | "5173271" |
| "5174876"     | "5196041" |
| "5200029"     | "5206925" |
| "5225288"     | "5237194" |
| "5287427"     | "5296089" |
| "5303319"     | "5306569" |
| "5309302"     | "5338625" |
| "5355089"     | "5381262" |
| "5427669"     | "5435826" |
| "5472795"     | "5475528" |
| "5475569"     | "5478456" |
| "5483613"     | "5499207" |
| "5512147"     | "5538796" |
| "5555127"     | "5561004" |
| "5563979"     | "5565071" |
| "5569520"     | "5591520" |
| "5597660"     | "5603816" |
| "5607560"     | "5607789" |
| "5612152"     | "5613995" |
| "5645626"     | "5654054" |
| "5654984"     | "5686360" |
| "5689522"     | "5693956" |
| "5702829"     | "5718813" |
| "5719976"     | "5731661" |
| "5738731"     | "5755938" |
| "5757126"     | "5762768" |
| "5771562"     | "5792550" |
| "5811177"     | "5830330" |
| "5831262"     | "5841931" |
| "5847865"     | "5849163" |
| "5853830"     | "5855744" |
| "5870273"     | "5882946" |
| "5900057"     | "5909346" |



|     |   |  |   |     |    |                     |
|-----|---|--|---|-----|----|---------------------|
|     |   | "5930046"   "5930584"  <br>"5942089"   "5948215"  <br>"5952778"   "5961682"  <br>"5966491"   "5977582"  <br>"6000603"   "6001224"  <br>"6004660"   "6024844"  <br>"6045626"   "6046081"  <br>"6051114"   "6051296"  <br>"6057557"   "6058233"  <br>"6071323"   "6077642"  <br>"6080643"   "6088492"  <br>"6093944"   "6106933"  <br>"6117279"   "6133670"  <br>"6146225"   "6154582"  <br>"6157765"   "6162709"  <br>"6165566"   "6168884"  <br>"6176986"   "6197217"  <br>"6204111"   "6210544"  <br>"6214660"   "6232242"  <br>"6236793"   "6242129"  <br>"6242132"   "6248291"  <br>"6248640"   "6252397"  <br>"6261917"   "6280585"  <br>"6280875"   "6281142"  <br>"6287986"   "6288835"  <br>"6290821"   "6290822"  <br>"6300215"   "6302939"  <br>"6306265"   "6344419"  <br>"6350353"   "6356694"  <br>"6358810"   "6361662"  <br>"6365300"   "6365319"  <br>"6376027"   "6409965"  <br>"6413382"   "6413645"  <br>"6416598"   "6423776"  <br>"6433380"   "6444750"  <br>"6452717"   "6488822"  <br>"6506289"   "6511615"  <br>"6533907"   "6533907"  <br>"6537428"   "6563998"  <br>"6576546"   "6602338"  <br>"6605228"   "6615614"  <br>"6632563"   "6673716"  <br>"6683244"   "6683749"  <br>"6750156"   "6760520"  <br>"6768855"   "6818356"  <br>"6827826"   "6846765"  <br>"6884327"   "RE32449").<br>PN. |   |     |    |                     |
| S28 | 0 | S26 and S27  | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/10/10<br>12:08 |



|     |    |   |   |     |     |                     |
|-----|----|---|---|-----|-----|---------------------|
| S29 | 4  | S24 and S27   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON  | 2008/10/10<br>12:08 |
| S30 | 4  | ("20030044118"  <br>"6088492").PN.  | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON  | 2008/10/10<br>12:10 |
| S31 | 19 | "5972516"   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON  | 2008/10/10<br>12:23 |
| S32 | 2  | ("7218809").PN.   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR  | OFF | 2008/10/10<br>12:24 |
| S33 | 2  | ("5972516").PN.   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR  | OFF | 2008/10/10<br>12:24 |
| S34 | 13 | (US-20070263676-\$ or<br>US-20050225839-\$ or US-<br>20080107376-\$ or US-<br>20030063629-\$ or US-<br>20030007718-\$ or US-<br>20030044118-\$).did. or<br>(US-7340124-\$ or US-<br>6751241-\$ or US-<br>6549688-\$ or US-<br>5761234-\$ or US-<br>6088492-\$ or US-<br>5972516-\$ or US-<br>7218809-\$).did. | US-PGPUB;<br>USPAT  | ADJ | ON  | 2008/10/10<br>13:59 |



|     |    |   |   |     |     |                     |
|-----|----|---|---|-----|-----|---------------------|
| S35 | 13 | (US-20070263676-\$ or US-20050225839-\$ or US-20080107376-\$ or US-20030063629-\$ or US-20030007718-\$ or US-20030044118-\$).did. or (US-7340124-\$ or US-6751241-\$ or US-6549688-\$ or US-5761234-\$ or US-6088492-\$ or US-5972516-\$ or US-7218809-\$).did.                                       | US-PGPUB;<br>USPAT  | ADJ | ON  | 2008/10/11<br>20:12 |
| S36 | 2  | ("6,760,520").PN.   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR  | OFF | 2008/10/11<br>20:13 |
| S37 | 2  | ("20030185266").PN.   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR  | OFF | 2008/10/11<br>20:14 |
| S38 | 15 | (US-20070263676-\$ or US-20050225839-\$ or US-20080107376-\$ or US-20030063629-\$ or US-20030007718-\$ or US-20030044118-\$ or US-20030185266-\$).did. or (US-7340124-\$ or US-6751241-\$ or US-6549688-\$ or US-5761234-\$ or US-6088492-\$ or US-5972516-\$ or US-7218809-\$ or US-6760520-\$).did. | US-PGPUB;<br>USPAT  | ADJ | ON  | 2008/10/11<br>20:14 |
| S39 | 15 | (US-20070263676-\$ or US-20050225839-\$ or US-20080107376-\$ or US-20030063629-\$ or US-20030007718-\$ or US-20030044118-\$ or US-20030185266-\$).did. or (US-7340124-\$ or US-6751241-\$ or US-6549688-\$ or US-5761234-\$ or US-6088492-\$ or US-5972516-\$ or US-7218809-\$ or US-6760520-\$).did. | US-PGPUB;<br>USPAT  | ADJ | ON  | 2008/10/25<br>09:36 |



|     |      |                               |   |     |    |                     |
|-----|------|-------------------------------|---|-----|----|---------------------|
| S40 | 247  | "I11" and (laser near2 diode) | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/10/25<br>09:36 |
| S41 | 4750 | "I1" and (laser near2 diode)  | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/10/25<br>09:36 |
| S42 | 15   | S39 and (laser near2 diode)   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/10/25<br>09:36 |
| S43 | 4    | S42 and (index with buffer)   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/10/25<br>09:37 |
| S44 | 0    | S43 and amorphous             | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/10/25<br>09:39 |
| S45 | 1    | S42 and amorphous             | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/10/25<br>09:39 |
| S46 | 1    | (10/106726).APP.              | USPAT; USOCR  | ADJ | ON | 2008/10/25<br>09:41 |
| S47 | 1    | S42 and amorphous and buffer  | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/10/25<br>09:42 |
| S48 | 5    | S42 and ( buffer)             | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/10/25<br>09:43 |



|     |    |   |   |     |     |                     |
|-----|----|---|---|-----|-----|---------------------|
| S49 | 5  | S48 and ( ( rare-earth) or (rare earth) or al <sub>2</sub> o <sub>3</sub> or y <sub>2</sub> o <sub>3</sub> or tio <sub>2</sub> or alumina or (aluminum-oxide) or (aluminum oxide) or (titanium-oxide) or (titanium oxide) or ("Al.sub.2O.sub.3") or ("Y.sub.2O.sub.3") or ("TiO.sub.2")) with (waveguide or slab or layer)) | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON  | 2008/10/25<br>09:45 |
| S50 | 5  | S48 and ( ( al <sub>2</sub> o <sub>3</sub> or y <sub>2</sub> o <sub>3</sub> or tio <sub>2</sub> or alumina or (aluminum-oxide) or (aluminum oxide) or (titanium-oxide) or (titanium oxide) or ("Al.sub.2O.sub.3") or ("Y.sub.2O.sub.3") or ("TiO.sub.2")) with (waveguide or slab or layer))                                | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON  | 2008/10/25<br>09:45 |
| S51 | 3  | S50 and (laser with substrate)  | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON  | 2008/10/25<br>09:49 |
| S52 | 3  | S50 and ((laser or diode) with substrate)   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON  | 2008/10/25<br>09:49 |
| S53 | 12 | S42 and ((laser or diode) with substrate)   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON  | 2008/10/25<br>09:52 |
| S54 | 2  | ("7218809").PN.   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR  | OFF | 2008/10/25<br>09:55 |
| S55 | 0  | S54 and ((laser or diode) with substrate)   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON  | 2008/10/25<br>09:56 |



|     |    |   |   |     |    |                     |
|-----|----|---|---|-----|----|---------------------|
| S56 | 1  | S42 and folded  | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/10/25<br>10:01 |
| S57 | 11 | S42 and active  | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/10/25<br>10:05 |
| S58 | 6  | S57 and array   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/10/25<br>10:05 |
| S59 | 6  | S42 and active and array  | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/10/25<br>10:22 |
| S60 | 6  | S42 and taper   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON | 2008/10/25<br>10:27 |
| S61 | 11 | (US-20030063629-\$ or<br>US-20030007718-\$ or US-<br>20030044118-\$ or US-<br>20030185266-\$).did. or<br>(US-6751241-\$ or US-<br>6549688-\$ or US-<br>5761234-\$ or US-<br>6088492-\$ or US-<br>5972516-\$ or US-<br>7218809-\$ or US-<br>6760520-\$).did. | US-PGPUB;<br>USPAT  | ADJ | ON | 2008/10/25<br>10:39 |
| S62 | 4  | (US-20030044118-\$ or<br>US-20030185266-\$).did.<br>or (US-6088492-\$ or US-<br>6549688-\$).did.  | US-PGPUB;<br>USPAT  | ADJ | ON | 2008/10/25<br>10:40 |
| S63 | 4  | (US-20030044118-\$ or<br>US-20030185266-\$).did.<br>or (US-6088492-\$ or US-<br>6549688-\$).did.  | US-PGPUB;<br>USPAT  | ADJ | ON | 2008/10/25<br>16:55 |



|     |   |  |   |     |     |                     |
|-----|---|--|---|-----|-----|---------------------|
| S64 | 3 | S63 and vertical   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON  | 2008/10/25<br>16:55 |
| S65 | 2 | ("20040105644").PN.  | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | OR  | OFF | 2009/08/16<br>17:02 |
| S66 | 4 | (US-20030044118-\$ or<br>US-20030185266-\$).did.<br>or (US-6088492-\$ or US-<br>6549688-\$).did. | US-PGPUB;<br>USPAT  | ADJ | ON  | 2009/08/16<br>17:08 |
| S67 | 4 | S66 and loss   | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | ADJ | ON  | 2009/08/16<br>17:08 |

**EAST Search History (I nterference)**

| Ref # | Hits | Search Query   | DBs            | Default Operator | Plurals | Time Stamp       |
|-------|------|--|----------------|------------------|---------|------------------|
| L1    | 4    | ("5362672"  <br>"5789071"  <br>"6641704"  <br>"7544276").PN. | USPAT;<br>UPAD | ADJ              | ON      | 2010/06/14 14:13 |
| S68   | 97   | ((385/14) or<br>(385/129)).CCLS.                             | UPAD           | OR               | OFF     | 2009/12/15 17:03 |
| S69   | 0    | S68 and ( amorphous<br>with (lens near2<br>duct)).clm.       | USPAT;<br>UPAD | ADJ              | ON      | 2009/12/15 17:04 |

**6/ 14/ 2010 2:15:47 PM**
**C:\ Documents and Settings\ pradkowski\ My Documents\ EAST\ Workspaces\ 2010 - pp - all\ PP -  
19\ 10 650 461 Derek Optically coupling into highly iniform waveguides.wsp**